

Delta Wetlands Testimony  
State Water Resources Control Board  
Bay-Delta Workshop\*

Members of the Board, Mr. Pettit, Members of the Staff:

I am pleased to address you on hearing notice issue No. 1, the issue of what Fish and Wildlife protective standards should be set by this Board. Delta Wetlands' view is that it is extremely important to establish standards that create an equitable and efficient use of Delta resources and a balanced and practical approach to Delta management.

It is extremely difficult to identify specific standards which you might set by the end of this year. You will undoubtedly become impatient with the testimony that you are hearing at this workshop because of this difficulty. However, through various testimony, it has been made clear that it is certainly possible at this time to:

1. Establish daily information standards that require data to be collected and shared on a real-time basis: these standards should define what daily information is currently available (and what needs to be developed in the future) to accurately describe and evaluate other proposed standards;

---

\*Presented by James L. Easton, Vice President, HYA Consulting Engineers, on July 14, 1994, at Sacramento, California.

2. Determine and adopt "minimum protection standards" as described by Dr. Russ Brown of Jones & Stokes Associates; and
3. Develop a framework for setting what Dr. Brown described as "adaptive allocation objectives."

These are extremely important steps toward establishing a Delta management system that will efficiently use Delta resources and effectively protect the Delta ecosystem, and they can be taken now.

Other entities and coalitions have testified that it is possible now to establish "frameworks" with the ultimate goal of developing standards which would provide a comprehensive protection program. Elements of those programs can immediately be implemented. Other standards, such as the adaptive allocation standards described by Dr. Brown, will have to be formulated and tested over time.

In addition to setting numerical standards, another extremely important aspect of standard setting is the period used to determine compliance with that standard. There was much negotiation and dispute regarding what the averaging periods and compliance periods should be for various standards which were in draft Decision 1630. Those same debates continue, where operational flexibility and water needs of diverters are balanced against the need of fisheries and habitat to have continuous compliance with the standards which are set with the intention of

protecting them. Therefore, in addition to setting various categories of standards, it is extremely important to focus on the periods that will be used for determining compliance. In general, the shorter a multiple day running average is for a standard, the better the protection is for the fisheries and habitat intended to be protected.

As Dr. Brown's testimony today and in previous workshops has indicated, the Delta world should move rapidly to real-time management. One of the benefits of daily management is the improved ability to have short averaging periods for standard setting, so that the intended fisheries and habitat benefits are realized consistently and constantly. Delta Wetlands urges that the shortest averaging period possible be established for every standard that is adopted.

Mr. David Vogel has also testified on behalf of Delta Wetlands today. He has raised the concern, related to the development of Delta standards, that there are scientific tools upon which the Board is relying to a great extent that may be seriously flawed. These problems can be remedied over time, but the key point for standard setting purposes is to recognize their limitations and deficiencies if they are to be used in the Board's initial standard setting. The Board should simultaneously seek the improvement of these tools, or the development of new ones, that will provide a comprehensive, reliable, accurate and consistent scientific basis for current and future standards.

The Delta Master, described in detail by Dr. Brown at earlier workshops, could also formulate and implement a comprehensive program to obtain much needed scientific information

together with the development of appropriate means of evaluating, disseminating and using that information to improve Delta management.

There are numerous ways in which flexibility in standards is important. Not only is there a clear need for flexibility in using scientific tools that must be changed and improved over time, but there must be flexibility in setting the standards themselves. As Dr. Brown testified with respect to his "adaptive allocation standards," there are various requirements that have to be balanced with one another. For example, in many situations, meeting a QWEST standard very often duplicates the result of a Delta export limit. A QWEST standard and a DCC gate closure standard might involve "tradeoffs" instead of resulting in additive benefits.

Every gate closure, flow requirement, and other mechanical adjustment has to be understood in the context of the entire hydrodynamic system of the Delta. This will avoid duplicative, ineffective or wasteful standards. Efficient, balanced management of the Delta will rely heavily on recognition and careful consideration of "tradeoffs" and wise selection between alternatives. The effectiveness of flexible "adaptive allocation objectives" can be tested with modelling that has been developed and used extensively by the projects and others such as Jones & Stokes Associates.

One of the issues that underlies many of the questions stated in workshop notices is who, or what entity or entities, would actually manage the Delta. In draft Decision 1630, much of daily Delta decision-making was assigned to the Board's Executive Director or his or her

designee. Delta Wetlands supports the concept of a "Delta Master," described in detail by Dr. Brown at earlier workshops. The Delta Master concept implicitly includes extensive participation by the state and federal agencies charged with various Delta regulatory responsibilities, including the State Board, the Department of Fish and Game, and the federal fish and wildlife agencies.

A Delta Master is not just an academic idea, but rather is one that fulfills the need for a single management entity that possesses the experience, expertise, courage and "clout" to be objective, decisive and fair in managing an extremely complex and changing ecological system. The Delta Master idea is new only in the Delta context; the basic concept is well known in complex interstate stream systems and managed groundwater basins. An important benefit of a Delta Master is that it would allow immediate response to information and make possible daily management of the Delta. A system can be designed so that the Delta Master's authority and jurisdiction would not detract from the authority or jurisdiction of the Board or any other agency. Optimally, it would enhance the powers of those agencies by allowing immediate translation of information into action.

It is Delta Wetlands' view that one of the most important goals of this proceeding has to be to come as close as possible to a means of managing the Delta on a real-time basis. Everyone would benefit from that approach, so long as it allows a practicable amount of operational flexibility to project operators and diverters in the Delta and upstream. Daily

standards which reflect the movement towards actual daily Delta operations would be both farsighted and practicable.

Finally, on somewhat of a procedural note, the hearing notice for this workshop outlines a very interesting approach for hearing item No. 2 on the economic and social effects of alternative standards. The Board notice directly asks that workshop participants who intend to undertake an economic analysis of a set of alternative standards identify their intentions at the workshop. In addition, the notice requests that the economic analyses identify certain elements and asks for recommendations on methods to be used related to how the Board should analyze economic and social effects of standards. It seems to us that this requirement should be applied to modelling which is focused on the other two aspects of Delta management: water costs and fish and wildlife population and habitat. It is a concern that the Board take advantage of the access that has been offered to it to make maximum use of the modelling work and other analytical efforts that Jones & Stokes has described, as well as the offers of the Department of Water Resources and others. Delta Wetlands joins with Jones & Stokes Associates to offer to the Board to perform analyses of possible standards, using the RMA transport, DELTASOS and DAILYDOS models. This work would be performed at no cost to the Board.

One of the Board's key concerns, expressed in various ways throughout these workshops, is whether the Board will be able to implement the ideas that have been discussed at these workshops by the end of this year. In closing this testimony, Delta Wetlands wants to urge that the daily information standards that Dr. Brown outlined can certainly be set and implemented

immediately. That would be of significant help in establishing other standards. The minimum protection standards, which were his second category of standards, likewise share the attribute that they can be set and implementation begun this year. The adaptive allocation standards will require more time and a trial period for testing their usefulness and to adjust for the tradeoffs I've described earlier. It is important, however, that even though every conceivable adaptive allocation standard cannot be evaluated and implemented by the end of the year, these types of standards should still be provided for and some tried as soon as possible. This type of suggestion is reflected by the testimony of other entities and coalitions. The theme that there are adaptive allocation standards that have to be used, but will require time to develop and test, reflects a reality that shouldn't prohibit their use.

Some may think that what we have said is self-serving. We hope not. The Delta Wetlands Project may not come to fruition if the Delta's resources are mismanaged. That unhappy consequence will be minor compared to the dreadful, statewide economic consequences and the loss of the opportunity to restore and protect one of our most valuable and diverse ecosystems. I am glad that the five of you, supported by an experienced, expert staff, are striving to transform the chaos of the past into the progressive, adaptive and successful Delta Management System of the future.

Thank you and good luck.